

Exhibit 12
(Redacted)
(Previously Filed Under Seal as Dkt. 412)



Expert Report of Brooks L. Hilliard CMC® CCP

**Business Automation Associates, Inc.
Phoenix, Arizona**

In the matter of:

Fair Isaac Corporation

v.

Federal Insurance Company and Ace American Insurance Company

Case No. 16-CV-1054 (WMW/DTS)

United States District Court
District of Minnesota

CONFIDENTIAL – ATTORNEY’S EYES ONLY

May 31, 2019





I. INTRODUCTION

This report contains a true and accurate statement of my opinions, including explanations of the factors that support them, reached based on my personal analysis of the evidence in Fair Isaac Corporation ("FICO") v. Federal Insurance Company ("Federal") and Ace American Insurance Company ("Ace American"), a litigation relating to the licensing of FICO's Blaze Advisor software ("Blaze Advisor") by Chubb & Son ("Chubb & Son"), a division of Federal. I affirm I am independent of the parties to this matter and their legal advisors.

I was engaged by Merchant & Gould PC on behalf of FICO, and asked to review and respond to the reports prepared by Federal/Ace American's experts, Dr. Steven Kursh and Mr. William McCarter, both dated May 17, 2019 (the "Kursh Report" and the "McCarter Report").

If called to testify, I anticipate that my testimony will concern the matters addressed in this report. I note that the Kursh Report states, if this matter goes to trial, Dr. Kursh plans to use one or more exhibits or computerized presentations summarizing or supporting the opinions made in his report. He explained that any computerized presentation may include materials taken directly from his report, and that he may also use the materials on which he relied in generating his report and other materials related to this matter as exhibits at trial. I will likely use similar materials if this case proceeds to trial.

I plan to consider any additional information that may become available in this proceeding following the submission of this report and will modify or supplement my analysis and opinions accordingly.

This report is organized into eight parts: (1) A review of my expertise and qualifications, (2) A statement of my opinions, (3) The methods I used to reach my opinions, (4) A detailed explanation of the support for each opinion, (5) Publications, (6) Prior Testimony, (7) Compensation, and (8) Concluding notes.

II. CONSULTING BACKGROUND

In my consulting practice over the past 37 years, my firm, Business Automation,

has consulted for more than 200 companies, governmental agencies and not-for-profit organizations. My work has included the selection, implementation and ongoing support of business information technology applications, including both hardware and software for data and voice communication. As a part of these consulting engagements, my clients have licensed and purchased (or were considering the license or purchase of) various types of general purpose and special purpose business software, including applications used in the financial industry.

Over the past 35 years, I have been engaged as an expert witness / consultant in more than 120 legal disputes. These matters include (a) the implementation and performance of various business software applications, and (b) intellectual property disputes between computer software and/or systems suppliers. Although most engagements have been settled out of court, I have given testimony numerous times in depositions, trials, hearings and arbitrations.

I am one of fewer than fifteen professionals in the world to be both a Certified Management Consultant™ (see Exhibit #1) and a Certified Computing Professional (see Exhibit #2). My educational background includes a Master of Business Administration (MBA) degree from Harvard Business School and a Bachelor of Science degree in Mechanical Engineering with Deans' List academic honors from the Massachusetts Institute of Technology. In addition, I have lectured on computer systems and programming for the Arizona State University School of Business and the American Management Association. Prior to founding Business Automation Associates in 1980, I held both line and staff positions for several major computer companies where I had responsibilities in the areas of designing, developing, marketing and supporting a wide variety of computer products used in both business and government applications. A copy of my professional biography is attached (see Exhibit #3).

In addition to my full-time consulting activities, I have served as a member of the Arizona State Bar Technology Task Force, written a book on computer selection (published by Dow Jones), published my own hard copy and electronic computer newsletters, provided commentary on computer issues for the nationally-syndicated MARKETPLACE news program on Public Radio International, conducted seminars, spoken professionally on various computer issues and been active in several civic organizations. I am a past Board of Directors member for the Institute of Management Consultants USA, the Arizona Harvard Business School Alumni Association, the Arizona Chapter of the National Conference of Christians and

Jews, Devereux Foundation (Arizona), Junior Achievement of Central Arizona, the Phoenix 100 Rotary and have previously served as the Chairman of the Ethics Committee for the Institute of Management Consultants USA. My firm, Business Automation, also maintains membership in the Arizona Technology Council and the Independent Computer Consultants Association. And I am a member of the Arizona Harvard Business School Alumni Association, the MIT Alumni Association, the Phoenix 100 Rotary, the Institute for Management Consultants USA, the Institute of Electrical and Electronics Engineers ("IEEE") and the Project Management Institute ("PMI").

III. METHODS

To reach the opinions above, I relied on my experience in the industry and reviewed the documents, pleadings, deposition transcripts, expert reports and reference materials listed in Exhibit #4. I also spoke in person and/or by telephone with FICO employee Bill Waid. Where I needed information that was not readily at hand from those resources, I researched issues (all of which are identified in the footnotes within this report) on the Internet.

It is my normal practice, when rendering opinions in legal matters, to use a rigorous and standardized methodology. I have used that method here. Although there are no mandatory analytic standards for the information technology consulting business, my methodology involves the normal consultative process of determination of the issue to be investigated, research and information gathering, review of potential hypotheses, rigorous analysis to determine the answer to the designated issue, and preparation of this report summarizing the results of the consulting effort. In reaching my opinions, I rely only on factors generally relied upon and considered reliable by experts in my field. As is my normal practice, I have taken care to apply my expertise related to the computer industry customs and practices relevant to this matter in an objective manner.

My opinions are based on my professional involvement in analyzing, drafting and/or negotiating several hundred software licenses in my consulting and expert witness engagements. Based on this experience, I provide opinions about whether particular license provisions, and the wording used to express them, are common and consistent with the provisions customarily found in licenses for other comparable business software.

Some opinions expressed in Federal's experts' reports either (a) include the expert's interpretation of the meaning of various provisions of the 2006 Software License and Maintenance Agreement ("License Agreement") at issue in this case, or (b) rely on an implicit assumption the expert report makes regarding how a particular license provision should be interpreted. It is my understanding that contractual interpretation is normally a legal matter rather than an Information Technology or business matter. The explanations of my opinions in this report focus on business and industry factors that can assist the Court or the finder of fact to understand any terms of art and/or the business context that licensors and licensees would normally use to determine what rights, obligations and/or restrictions are embodied by the provisions of the License Agreement.

IV. SUMMARY OF OPINIONS

Opinion #1: The licensing limitations in the License Agreement are comparable to limitations customarily found in the license agreements of other commercial software providers. FICO applied these limitations in a manner that is consistent with the normal customs and practices of the commercial software industry.

Opinion #2: FICO had good and sufficient reasons, consistent with the normal customs and practices of the commercial software industry, for conditioning its consent to the continued use of its Blaze Advisor software on Federal's willingness to accept a negotiated increase in the license price.

Opinion #3: Dr. Kursh's contention that FICO's pricing and discounting practices are inconsistent with the customs and practices of the commercial software industry is unsupported and incorrect.

Opinion #4: The terms "commercially reasonable" and "commercially unreasonable" used throughout the Kursh Report are so vague and undefined that judgments based on them are not supportable.

Opinion #5: Mr. McCarter fails to support his contention that Blaze Advisor has minimal value to Federal because it is "industry agnostic", easily replaceable and only one of many technologies that

Federal employs to operate its insurance business. The evidence shows that FICO's Blaze Advisor provided critical capability, contributing to Federal's revenue that Chubb & Son had not developed internally.

V. BASIS FOR OPINIONS

In addition, because I have been professionally involved in analyzing, drafting and/or negotiating several hundred software licenses in my consulting and expert witness engagements, the explanation of my opinions below also addresses whether particular license provisions, and the wording used to express them, are common and consistent with the provisions customarily found in licenses for other comparable business software.

The paragraphs that follow address each of my opinions stated above and explain the support for each of them. In the instances where this support relies on the contract interpretation and/or contract enforceability issues described above, I have referenced them in the text.

Opinion #1: The licensing limitations in the License Agreement are comparable to limitations customarily found in the license agreements of other commercial software providers. FICO applied these limitations in a manner that is consistent with the normal customs and practices of the commercial software industry.

There are three areas where Dr. Kursh criticizes FICO's actions relating to the terms and conditions of the License Agreement:

1. **License Scope:** Dr. Kursh's initial opinion states that it was commercially unreasonable for FICO to claim Federal breached the License Agreement by installing the Blaze Advisor software outside the United States. Dr. Kursh's opinion states that FICO's resulting demand that Federal pay higher license fees to cure that breach was also commercially unreasonable, relying on a nonstandard interpretation of the License Agreement, specifically his assertion that Section 2 of the License Agreement allows Federal to install

Blaze Advisor software on computers outside the United States.¹

2. **Non-assignment/Termination Clauses:** Dr. Kursh's opinion states that it was commercially unreasonable for FICO to terminate Chubb & Son's license for continued use of Blaze Advisor software after the acquisition and change of control of Federal. Here Dr. Kursh relies on his belief that despite the non-assignment provisions in Section 10.8, licensed entities being acquired (as Federal was) "would not expect to be confronted with such [a demand for termination of software licenses] ..." and therefore FICO's termination of the License Agreement was inappropriate.²
3. **Verification and Audit Rights:** Dr. Kursh's report states that because FICO did not assert its Section 3.5 audit right, it had waived that right and had shown its true interest was artificially inflating Federal's license fees.³

In all three instances, Dr. Kursh's interpretation of the License Agreement provisions is contrary to the normal and customary way the provisions are commonly understood and applied in the commercial software industry.

A. Rebuttal to Opinion 1 of the Kursh Report: FICO's determination that Federal had breached the scope of the License Agreement

Dr. Kursh's opinion regarding FICO's determination that Federal violated the scope limitations of the License Agreement is inconsistent with the customs and practices of the commercial software industry.

1. The license grant is limited to Affiliates of Chubb & Son

Sections 2.1 and 2.1(c) of the License Agreement cover the license grant to Blaze Advisor software. The provisions specifically limit the license grant as follows:⁴

2.1 License Grant to [Blaze Advisor software]. Subject to the terms, conditions and

¹ Kursh Report, dated May 17, 2019, paragraphs 70–89 on pages 22–30.

² *Id.*, paragraphs 90–98 on pages 30–32.

³ *Id.*, paragraphs 137–140 on pages 48–49.

⁴ Section 2.1 and 2.1(c) of the Blaze Advisor Software License and Maintenance Agreement (FICO0001702–1717) between Fair Isaac Corporation and Chubb & Son, a division of Federal

limitations of this Agreement, [FICO] hereby grants to [Chubb & Son] a perpetual ..., non-exclusive, non-transferable, limited license to use [Blaze Advisor] ... for its internal business purposes, subject to the additional limitations set forth [in (c)] below and/or listed in Exhibit A.

(c) Enterprise-Wide License. ... [Chubb & Son] may use [Blaze Advisor] ... provided, however, that such use is for [Chubb & Son's] use only and not for use by any of [Chubb & Son's] affiliated, subsidiary, or parent companies.

This was further clarified by Exhibit A, which was amended twice, with Amendment Two specifying the limitation to the licensed usage as follows:⁵

... The Enterprise-Wide License shall mean that [Chubb & Son] and its Affiliates may use [Blaze Advisor] for their internal business purposes ... subject to and in accordance with all of the provisions of the [License] Agreement. "Affiliates" shall mean any other entity directly or indirectly controlled by [Chubb & Son], where "control" means the ownership of more than 50% of the aggregate of all voting interests [of the] entity. Such other entity is an Affiliate only during the period that such "control" exists. [Chubb & Son] shall at all times be responsible for its Affiliates' use of the [Blaze Advisor software].

Based on my professional experience reviewing hundreds of software license agreements, license grant provisions similar to Sections 2.1 and 2.1(c) of the FICO License Agreement are common in such agreements. This is supported by multiple sources including Mr. Gene Landy's 2008 book, *The IT/Digital Legal Companion*, which states:⁶

... all [licensed] uses that are not expressly permitted should be forbidden, and the vendor will want the [software] license agreement to make that clear. ... Part of the craft of license grants is drafting to anticipate contingencies [such as when the licensee] is a corporation, what happens if the [licensee] merges with another corporation [whether] the enlarged company get[s] the benefit of the license with no additional payment.

In the Selected Model Forms section at the end of the sixth edition of *A Practical Guide to Software Licensing for Licensees and Licensors*,⁷ H. Ward Classen includes an annotated sample license agreement where he provides sample language for an

Insurance Company, dated June 30, 2006, subject to Sections 1 of Amendment Two, dated December 28, 2006, where the Blaze Advisor software license is designated as Enterprise-Wide.

⁵ *Id.*, Amendment Two Section 1, page 2.

⁶ Landy, Gene K., *The IT/Digital Legal Companion*, Syngress Publishing, Elsevier, Inc., ©2008, page 198.

⁷ Classen, H. Ward, *A Practical Guide to Software Licensing for Licensees and Licensors*, 6th Edition, ©2016, American Bar Association, page 42 (emphasis in text).

“Affiliates” limitation in a software license agreement:⁸

The Licenser will often want to restrict the license to the Customer alone or the Customer’s then existing “Affiliates” ... to limit the license to a finite number of entities ... the breadth of this definition is often an element of price.

This is important because Chubb & Son is a division of Federal; it does not have affiliates (*i.e.*, entities it controls itself) because it is not a corporation. Any related entities connected through Federal do not have the rights and obligations granted to Chubb & Son through the license because Chubb & Son does not control them.

2. The license grant is limited by Territory

Dr. Kursh’s first opinion is further flawed because there is a territory restriction in the Blaze Advisor License Agreement based on the Definitions in Section 1 and the License Grant in Section 2.1. Section 2.1 begins with: “Subject to the ***terms***, conditions and limitations of this Agreement ...”. This phrase is a direct reference to Section 1 Definitions, immediately above, which begins by stating “The following ***terms***, as used in this Agreement ... will have the meanings set forth below.” The final defined ***term*** in Section 1 is “Territory”, which states:

“**Territory**”, with respect to the installation and physical location of [Blaze Advisor], means the United States of America.

It should not have been a surprise to Chubb & Son in 2016 that the Section 1 Territory restriction applied to the Section 2 license grant because that had been known to Chubb & Son since at least June 2006, when Chubb & Son was negotiating with FICO to acquire a world-wide license to Blaze Advisor.⁹ Evidence of what Chubb & Son and FICO were writing to each other just before the License Agreement was signed shows Chubb & Son knew it had not licensed worldwide installation. Here is the timeline for that correspondence:

1. On June 26, 2006, Chubb & Son’s Associate Contract Manager, James Black, e-mailed Jandeen Boone, FICO’s Legal Counsel, a draft of the Software

⁸ *Id.*, pages 591–592.

⁹ I am aware that some FICO personnel who communicated with Federal in the years following the License Agreement execution thought that global usage had been included in the original license. The documents these individuals relied on in those later years are not consistent with documents that were contemporaneous with the License Agreement signing in 2006.

License and Maintenance Agreement for Blaze Advisor.¹⁰

- In the June 26 version from Mr. Black, the territory definition appeared as follows:

"Territory" means the United States of AmericaWorld-wide.

- The text of the cover e-mail says that the draft includes "Chubb revisions".

2. FICO did not accept this definition of Territory. Instead, the following day, June 27, Ms. Boone e-mailed a revised version of the same draft License Agreement.¹¹

- The territory definition was revised in this version to: **"Territory** with respect to the installation and physical location of the Fair Isaac Products means the United States of America."
- In the text of the cover e-mail for this version, Boone says that her revision "incorporat[es] the changes you requested to the extent Fair Isaac is able to agree to them."
- The territorial restriction of Boone's June 27 response, rejecting worldwide rights, is the same as the final signed License Agreement.

3. In her deposition testimony about these drafts, Boone (the FICO attorney) said she was the one who changed the wording for that term, and the change meant "the installation and location of the products had to be in the United States."¹²

4. Documentation of the communications between FICO and Chubb & Son prior to the signing of the second amendment to the License Agreement shows that FICO proposed a net price increase of [REDACTED] to allow global use of Blaze Advisor.¹³ But the second amendment, signed approximately a month later,

¹⁰ The cover e-mail is FICO0000148 and the draft agreement is FICO0000149 0001 (the page with the Territory definition) – 0000149 0021.

¹¹ The cover e-mail is FICO0000131 and the draft agreement is FICO0000132 0001 – 0000132 0017.

¹² Deposition transcript of J. Boone, dated 2/6/2019, page 73, lines 7–23.

¹³ FICO00005639.

does not mention global use, and the fee increment for the enterprise license (with no change to "Territory") was lowered to [REDACTED]

5. When the territory issue came up again in 2008, Chubb & Son's internal communications show that it understood that it did not have a worldwide license to Blaze Advisor, as evidenced by and e-mail from a Chubb employee who wrote:¹⁵

... the current license is not a worldwide license, nor does it cover Chubb's subsidiaries (us).

In reaching his opinions, Dr. Kursh has ignored all five of the preceding points.

FICO's imposition of a territorial limitation was normal and customary for the commercial software industry in my experience. Classen supports this in his explanation of the use of geographic restrictions on licensed software:¹⁶

Most licensors seek to limit the use of the licensed software to a specific country or site, for example, the United States ... Limiting location may allow the licensor to charge an additional license fee for each additional foreign affiliate or user not at the authorized site. ... The failure to limit the use of the licensed software to a particular country may also give rise to a number of export issues ... the use of such software outside the United States may be governed by the laws of a foreign jurisdiction ... which does not grant the same protections to the licensor as the laws in the United States.

This description explains why there is no reason that an enterprise license grant should override a geographic license limitation.¹⁷

3. Dr. Kursh's opinion that FICO was commercially unreasonable in determining that Federal exceeded the scope of the License Agreement is not supportable

Dr. Kursh's first opinion focuses on FICO's determination that Federal had breached the License Agreement based on Federal providing the Blaze Advisor software to unlicensed entities that installed it outside the United States. Dr.

¹⁴ FICO0002294-2296.

¹⁵ FED016515_0001-0003.

¹⁶ Classen, *op. cit.*, page 60.

¹⁷ See Schreiber deposition transcript, pages 112-113.

Kursh tries to claim that because Blaze Advisor was (in his view) covered by an enterprise-wide license, the provision limiting where the software could be installed should not matter. He cites multiple sources purportedly supporting this assertion, notably including statements from the deposition testimony of multiple FICO employees.

Dr. Kursh's analysis is flawed because, as explained above, FICO is far from unique in placing geographic (and other) limits on the extent of usage under an enterprise-wide software license. Further, support for his opinion is undercut by his failure to consider:

- The territory restriction, as written into the License Agreement, is not unfair or unusual (or, in Dr. Kursh's terminology, commercially unreasonable). Territory restrictions were commonly used in the commercial software industry, with the same limitation as the one in the License Agreement.
- The license terms relating to: (a) the licensee's enterprise, and (b) the territory where Blaze Advisor can be installed, are not in conflict because FICO and Chubb & Son specifically negotiated the territory restriction before signing the License Agreement. Dr. Kursh has no basis for his assumption that FICO's enterprise-based grant should have overridden its territory-based limitation. Furthermore, I am aware of no evidence, and Dr. Kursh provides none, that the "enterprise" that is the Chubb & Son division of Federal extended outside the United States.
- The history of the license negotiations shows the rejection of Chubb & Son's request for worldwide rights and the parties' agreement to the compromise position restricting the installation and physical location of the software to the United States.¹⁸
- Starting in 2006, when the License Agreement was signed, Blaze Advisor was licensed to the Chubb & Son division of Federal, not to Federal itself or to any Federal affiliate. However, Federal acknowledged that installations of Blaze Advisor outside the United States began well before Federal was acquired in 2016,¹⁹ but the License Agreement was never revised to authorize this.

¹⁸ FICO0000148 and FICO0000131.

¹⁹ See, e.g., Federal Insurance Company's Second Supplemental Answers to Interrogatory Nos. 2 and 3.

- Chubb & Son, the Blaze Advisor licensee, was a division of Federal and neither Dr. Kursh nor anyone else has produced evidence it controlled any entities, had any operations or employed any personnel outside of the United States.

Thus, FICO's determination that Federal had breached the License Agreement and not cured the breach within the cure period was entirely consistent with the customs and practices of the commercial software industry. Under these circumstances, FICO's requirement that Chubb & Son accept a renegotiation of the license is the type of resolution that, based on my many years of experience in the industry, I would normally expect to be acceptable to all parties.

B. Rebuttal to Opinion 2 of the Kursh Report: FICO's termination of the License Agreement under Sections 9.2 and 10.8

The Kursh Report's second opinion states that FICO's withholding its consent to the continued use of the software and terminating the License Agreement were, in his words, commercially unreasonable. Dr. Kursh's conclusions about this are unsupported and in conflict with the normal customs and practices of the commercial software industry.

1. Sections 10.8 and 9.2 address assignments and changes in control, and resulting license terminations

Section 10.8 sets parameters on how licensees' Section 2.1 license rights are to be handled when the licensee is acquired or comes under the control of a new entity. Specifically, Section 10.8 reads:²⁰

Neither [FICO nor Chubb & Son] shall, without the prior written consent of the other party, assign or transfer this Agreement, or any part thereof. In the event of a change of control of [Chubb & Son], or if [Chubb & Son] is merged with, acquired by or acquires another entity ... [that] shall be deemed to be an assignment subject to this section

This provision states that a "change of control" is deemed to be an assignment that requires FICO's consent. The provision further dictates that until that consent is

²⁰ Software License and Maintenance Agreement, Section 10.8 on page 8 (emphasis added).

given (or the License Agreement is terminated), the status quo must be maintained, as expressed by the following:²¹

... and [Chubb & Son] **shall make no expanded use** of [Blaze Advisor] ... unless and until [FICO] provides such written consent, which will not be unreasonably withheld. Any attempt to assign or transfer all or any part of this Agreement without first obtaining such written consent will be void and of no force or effect.

I have seen no evidence to support a contention, and Dr. Kursh provides none, that violating this provision (by acting to assign the License Agreement without consent) would not be adequate grounds for terminating the License Agreement.

Section 9.2 of the License Agreement is the provision that covers the circumstances and procedures related to termination of the License Agreement. It states:²²

Either [FICO or Chubb & Son] may terminate this Agreement for a breach by the other party of any of the material terms of this Agreement, or numerous breaches of duties or obligations hereunder that cumulatively constitute a material breach if the breaching party fails to cure the breach(es) within 30 days from receipt of written notice from the non-breaching party identifying the breach(es) and requiring them to be remedied.

2. FICO's termination of the License Agreement for violation of Section 10.8 is consistent with the customs and practices of the commercial software industry

In my experience: (a) license provisions prohibiting assignments similar to Section 10.8, and (b) license provisions relating to termination similar to those in Section 9.2, are common in the commercial software industry.

Therefore, once FICO learned that Federal was acquired and had undergone a change of control, its decision to terminate Federal's license following the parties' failure to reach an agreement, relying on Sections 10.8 and 9.2 of the License Agreement, was fully consistent with the normal customs and practices of the commercial software industry.

This judgment is completely consistent with both Landy's and Classen's understanding of this issue. For example, writing from the perspective of a

²¹ *Id.* (emphasis added).

²² Software License and Maintenance Agreement, *op. cit.*, Section 9.2(a) on page 6.

licensee, Landy states:²³

Software end-user agreements often state that the license is nonassignable and nontransferable ... there is one situation where a strict no-assignment provision can cause a customer an unpleasant surprise: That is when the customer tries to assign an expensive software license ... as part of the sale of all the assets of the customer's business operations.

Landy expands on the topic of limiting a license grant to a specific organization with the following example that is very similar to the FICO license:²⁴

"Change of Control" means the occurrence of any of the following with regard to a party: (i) consolidation or merger with any other corporation or entity in which the shareholders of a party as constituted immediately before the transaction owns less than fifty percent (50%) of the shares of the combined entity or (ii) a transaction or related series of transactions effecting a change in ownership of more than fifty percent (50%) of a party held by shareholders as of the effective date of the Agreement.

And he notes that "Most often the company looking for this kind of protection will want the right to terminate the [software license] in an unwanted change of control situation."²⁵ Landy addresses this concern in the context of enterprise wide licenses where he writes:²⁶

... if a customer corporation carries out an acquisition and doubles in size ... [d]oes the license now cover all of the newly acquired operations? It might, or it might not, depending on how the scope of use clause is drafted. **Similar problems occur when the software is licensed for use in a particular department or business unit and the unit merges with another** ... The limit to use is an issue in any corporation-wide license because ... banks, **insurance** ... and many other industries continue to undergo massive consolidation.

Landy also includes a forms appendix at the end of his book that has a Commercial End User License Agreement form with a sample assignment provision that reads as follows:²⁷

This Agreement may not be assigned by Customer without the prior written approval of Vendor ... Any purported assignment in violation of this Section will be void.

²³ Landry, *op. cit.*, page 329.

²⁴ *Id.*, page 229.

²⁵ *Id.*

²⁶ *Id.*, pages 326–327 (emphasis added).

²⁷ *Id.*, page 918.

In discussing termination, Landy states:²⁸

Perpetual end-user agreements do provide for termination of the agreement and all license grants under specified circumstances. For example, agreements will give the vendor the option to terminate the license [if the Customer] materially breaches the agreement and fails to cure the breach after notice.

Landy's sample contract form gives an example of such a termination provision:²⁹

Termination with Cause. Either party may terminate this agreement and its license grants by written notice ... in the event the other party materially fails to comply with any of the terms and conditions of the Agreement and such default has not been cured within thirty (30) days after receiving written notice of the breach ...

Classen discusses these same two issues, writing about assignment:³⁰

Given the potential uncertainty as to assignment, from the licensor's standpoint, the license should clearly state that the license is not assignable or transferable, whether by merger, consolidation, operation of law, or otherwise, and any attempt to do so is void. ... For clarity, the assignment clause should provide that the "operation of law" would include any change of control of the ownership structure of the licensee. ... This will potentially allow the licensor to prevent a transfer or in the alternative charge a transition fee if the license is acquired by another company.

Classen's annotated form license agreement gives the following sample wording, followed by his bulleted annotation:³¹

Prohibition on Assignment. Customer may not assign or transfer its interests, rights or obligations under this Agreement by written agreement, merger, consolidation, **operation of law**, or otherwise without the prior written consent of an authorized executive officer of Licensor. Any attempt to assign this agreement by Customer shall be null and void. Furthermore, for the purposes of this Agreement the acquisition of an equity interest in Customer of greater than 25 percent by any third party shall be considered an "assignment."

- ***Licensor must limit the ability of the Customer to assign the Agreement to avoid losing potential license fees. In a merger or acquisition, the entity being acquired will seek to assign its pre-merger contracts to the acquiring party to avoid paying a transfer or license fee. By stating that any assignment is "void" a court will not allow the assignment. ...***

²⁸ *Id.*, page 339.

²⁹ *Id.*, page 881.

³⁰ Classen, *op. cit.*, page 64.

³¹ *Id.*, pages 690–691 (bolding in text, underlining added).

Classen's explanation of termination provisions states:³²

Most license agreements set forth a number of criteria that allow the licensor to terminate the agreement and the underlying license. The most common [include] breach of the license grant.

The annotated form license agreement provides the following sample wording, covering what constitutes a default by a licensee:³³

Licensor and Customer acknowledge and agree that the following ... shall constitute a material breach of this Agreement ... (h) ... if Customer ... misuses the software in contravention of this Agreement ... [or] (j) Failure of a party to perform any other material obligation under this Agreement, provided that such failure is not cured within thirty (30) calendar days following the receipt of written notice of such failure ...

The following section of Classen's form agreement describes the possible remedies for such a default including a sample license provision stating: "Licensor shall be entitled to ... terminate [the Agreement] in whole or in part."³⁴

These sources confirm my opinion that the License Agreement's non-assignment (Section 10.8) and associated termination (Section 9.2) provisions are in line with similar provisions in license agreements of other commercial software developers.

3. Dr. Kursh provides no support for his termination opinion

The second opinion in the Kursh Report asserts that FICO's termination of the License Agreement based on a violation of Section 10.8 was commercially unreasonable. Dr. Kursh gives two reasons for this opinion. His first reason is FICO's refusal to promptly give its consent (which, according to the software license, was not to be unreasonably withheld) to the continued use of Blaze Advisor even though Federal now had a new (and much larger) corporate parent. This issue is the focus of my Opinion #2, below, and I will address it there.

³² *Id.*, page 114.

³³ *Id.*, pages 607–608 [Note: I have only quoted the descriptions of 2 of the 13 default criteria described in the form contract; the only two that could apply to terminating a licensee for using the licensed software in a way that the license does not allow.]

³⁴ *Id.*, page 609.

Dr. Kursh's second reason is the difficulty and time it would take for Federal to have complied with the terms of the termination provision's requirement that Federal:³⁵

... immediately cease using [Blaze Advisor] and related documentation (including all intellectual property arising from or related to the foregoing), shall remove all copies of the Fair Isaac Product(s) and related documentation from [Federal's] computers and systems. and shall either (i) destroy all copies of [Blaze Advisor], related documentation, and other [FICO] Confidential Information and intellectual property in [Chubb & Son's] possession; or (ii) return to [FICO] all copies of [Blaze Advisor], related documentation, and other [FICO] Confidential Information and intellectual property in [Chubb & Son's] possession.

However, none of the issues raised in the Kursh Report support his second opinion. Instead, there are at least six facts he has not considered including, but not necessarily limited to:

- Section 10.8 covers the deemed assignment of the license grant beyond the original licensee (*i.e.*, Federal's Chubb & Son division) and requires FICO's consent. Given the change in Chubb & Son's status after the acquisition, the normal custom and practice of the commercial software industry would have been for Federal and FICO to negotiate the price and terms under which FICO would consent to continued use of Blaze Advisor by the new entity.
- FICO had good and justifiable reasons for negotiating the conditions for its consent to the continued use of Blaze Advisor. Federal's unwillingness to agree to adequate compensation to FICO (as described in relation to Opinion #2, below) was inconsistent with the customs and practices of the commercial software industry.
- Even assuming any FICO employees actually knew about Federal's use of Blaze Advisor in connection with insurance policies from companies outside the United States, the fact that FICO did not take action immediately would not have waived FICO's right to act on that knowledge at a later time because the License Agreement includes a "No Waiver" provision (Section 10.4).³⁶

³⁵ Software License and Maintenance Agreement, *op. cit.*, Section 9.3.

³⁶ It is not very unusual, in my experience (in the interest of maintaining good relations with important customers), for software providers to occasionally allow minor — but not major —

- Federal could have ceased using Blaze Advisor as soon as FICO notified Federal that it was in breach of the License Agreement. Alternatively, it would have been consistent with the normal customs and practices of the commercial software industry for Federal and FICO to have negotiated agreeable terms to allow Federal to cease its use within an agreed and feasible time period. I have seen no evidence, and Dr. Kursh has provided no evidence, to indicate that Federal ever tried to explore that possibility.
- Federal's own insurance industry expert, Mr. McCarter, acknowledges in his report (see below) that Federal installed Blaze Advisor into at least ten applications,³⁷ at least some of which are located outside the United States.
- As Landy and Classen confirm (see above), license termination is a normal and customary remedy for breaches of software license agreements.

Taking these factors into consideration, there is no remaining way to support Dr. Kursh's contention that the termination of the License Agreement was unjustified.

C. Rebuttal to Opinion 4 of the Kursh Report: Auditing Federal's use of Blaze Advisor prior to termination was not required

Section 3.5 of the License Agreement deals with FICO's option to require Chubb & Son to provide FICO with an audit of how and where the Blaze Advisor software was being used. It states:³⁸

On Fair Isaac's written request, [Chubb & Son] shall provide to Fair Isaac a written certification executed by an authorized officer of [Chubb & Son] that provides the following information: (i) verification that [Blaze Advisor is] being used in accordance with the provisions of this Agreement; (ii) list of locations at which [Blaze Advisor is or has] been operated during the preceding twelve (12) month period; and (iii) the number of ... applications accessing or utilizing [Blaze Advisor].

Dr. Kursh does not explicitly state, or implicitly suggest, there is anything about Section 3.5 that is inconsistent with the customs and practices of the commercial software industry. Based on my software licensing experience and expertise, I

deviations from license restrictions as long as such deviations do not grow and get out of hand. See, e.g., Schreiber deposition transcript, pages 138–139.

³⁷ Chubb & Son identified 15 applications in a communication with FICO on February 25, 2016, FICO0001359.

³⁸ *Id.*, Section 3.5.

agree. Landy and Classen both discuss auditing the usage of licensed software,³⁹ but I have not quoted them because Dr. Kursh does not contend there was anything wrong with the audit requirement stated in Section 3.5.

The Kursh Report claims FICO's not invoking the audit right over the entire life of the license, from 2006 to 2016, was evidence that FICO did not care whether Federal was adhering to the Blaze Advisor license restrictions or not. Instead, he asserts, FICO used the acquisition, without the support of an audit, as an illegitimate pretext to force Federal to accept what he thinks is an unjustified increase in the license fees.

Because Dr. Kursh provides no viable explanation for his reasoning, he has no support for his opinion. A formal audit is not always required to justify an increase in the license fees, particularly for software products (like Blaze Advisor) where "list" pricing is based on very broad customer size ranges.⁴⁰ The normal custom and practice of the commercial software industry in circumstances where a licensor has a long working relationship with its licensee (as was the case here), would be for FICO to rely on Chubb & Son to maintain compliance with the license terms and, regardless of whether FICO was requesting periodic compliance audits, for Chubb & Son to notify FICO in advance if a license upgrade or revision was contemplated.

Opinion #2: FICO had good and sufficient reasons, consistent with the normal customs and practices of the commercial software industry, for conditioning its consent to the continued use of its Blaze Advisor software on Federal's willingness to accept a negotiated increase in the license price.

The Kursh Report's second opinion centers on a contention that, contrary to the requirement in Section 10.8 of the License Agreement, FICO unreasonably withheld its consent to the continued use of Blaze Advisor following the 2016 acquisition.⁴¹ Dr. Kursh amplifies this claim in his fourth opinion where his report states that

³⁹ Landy, *op. cit.*, pages 880–881, and Classen, *op. cit.*, pages 242–246.

⁴⁰ FICO0057406 (2003 price list) and FICO0005468 (2008 pricing model).

⁴¹ Kursh Report, *op. cit.*, paragraphs 90–94

FICO chose to pursue litigation instead of resolving the software misuse issue.⁴² This characterization of what happened in the wake of the 2016 corporate acquisition is not supported by the facts.

What actually happened was:

- FICO personnel, including Mr. Russ Schreiber and Mr. Mike Sawyer, communicated with Chubb & Son by telephone and e-mail in late 2015 and early 2016, before the acquisition occurred (on or about January 14, 2016), suggesting that “[FICO] would like to start the discussions and process to ensure that [Chubb & Son remains] in compliance with [its Blaze Advisor] license and have the license grants necessary to support the organization [after the acquisition is completed].”⁴³
- With no immediate progress in resolving the issues related to the acquisition, FICO sent Chubb & Son a notice of breach by FedEx approximately two weeks after the acquisition was finalized, which initiated the 30-day cure period and followed up by scheduling an in-person meeting to be held on February 11, 2016 (ultimately rescheduled for the following week).⁴⁴
- There were additional communications between FICO and Chubb & Son, including communications between in-house counsel for both parties. FICO extended the original 30-day cure period, which would have ended on February 29, 2016, to March 30 with both parties exchanging offers.
- FICO proposed at least three options as part of that communication, including an option that bundled Blaze Advisor with one additional application it believed Chubb & Son could utilize⁴⁵ to achieve a consolidated license fee discount of [REDACTED] below FICO’s list pricing.⁴⁶ FICO proposed a Blaze Advisor-only alternative as well, but this was not discounted as

⁴² *Id.*, paragraph 138 on page 49.

⁴³ FICO0000971, 000974–976 and 0003090–3091.

⁴⁴ FICO0001424–1425 and 1500–1501, and FED004590_0001–0002.

⁴⁵ See. *e.g.*, FED000594_0001–0002.

⁴⁶ See. *e.g.*, FED000351_0001.

heavily as the bundled application option.⁴⁷

- As negotiations between FICO and Chubb & Son continued in 2016, FICO learned of several installations of the Blaze Advisor software that had previously been done outside the United States during the years prior to the acquisition (that were not compliant with the 2006 License Agreement, as described in the explanation of Opinion #1, above), but it continued to pursue an updated licensing alternative that would cover those installations and resolve the license assignment issue associated with the acquisition.⁴⁸
- By March 30, 2016 (the extended deadline FICO had set to reach agreement so it could consent to the license assignment), with no resolution to the licensing issue, FICO notified Chubb & Son it was terminating the Blaze Advisor license in accordance with Section 9.2 of the License Agreement.⁴⁹

The timeline above shows that FICO gave Federal an extended period of time to cure the breach of the License Agreement terms: 60+ days instead of the 30 days called for in the contract. In my experience this is commonly done in the software industry when the licensor is genuinely trying to resolve an issue with a licensee rather than moving forward with litigation as early as the License Agreement permits.

As the two-month cure period was reaching its conclusion, it was Federal that broke off the communications with FICO. Ms. Tamra Pawloski (Federal's responsible VP of Software Compliance and Optimization, Global Vendor Services Organization) wrote to Mr. Bill Waid (FICO's General Manager for Decision Management Software) to say:⁵⁰

We are extremely disappointed with the offer and have no questions. I am canceling the call as we will use this time to talk to our executives.

Considering the time and effort that FICO expended attempting to negotiate a mutually agreeable price (up to [REDACTED] below FICO's list price) for a licensing

⁴⁷ FED000345_0001-0003 and 000360_0001-0002; and FICO00000003-004, 0000438-0439, 4443-4445, 0747-0750, 0992-0993, 2787-2788, and 2842-2846.

⁴⁸ FED0009413_0001 and FICO0000767.

⁴⁹ FICO0018784.

⁵⁰ FICO0004533.

option that would meet Federal's needs, and that Federal had installed Blaze Advisor outside the United States for an extended period without a valid license covering such use, FICO had more than met the normal and customary standards for commercial software providers. Under these circumstances, I cannot agree with Dr. Kursh's unsupported contention that FICO should have consented to the continued use of Blaze Advisor on the terms Federal proposed following the acquisition of Federal and the associated change of control.

Opinion #3: Dr. Kursh's contention that FICO's pricing and discounting practices are inconsistent with the customs and practices of the commercial software industry is unsupported and incorrect.

In his third opinion, Dr. Kursh asserts that:⁵¹

- The way that FICO determines the license fees it quotes to prospective and current customers is inconsistent with software industry norms.
- The lost license fee damages calculated by FICO's damages expert ignored Federal's actual use of the Blaze Advisor software.

I have been involved with the marketing and pricing of business software for almost my entire professional career as an expert witness, information technology consultant to business, marketing executive (involved in setting software prices), product manager for technology products and as a commissioned salesperson. In my consulting capacity alone, I completed more than 200 engagements almost all of which involved evaluating competitive pricing proposals from multiple business software providers. Based on this experience, Dr. Kursh's first pricing contention is wrong and his second one ignores the relevant customs and practices of the commercial software industry.

Much of the support offered for the third opinion in the Kursh Report specifically references the factors and/or assumptions used by Mr. Zoltowski to calculate damages. I do not profess to be qualified as a damages expert so instead of

⁵¹ Kursh Report, *op. cit.*, paragraphs 99–136 on pages 32–48.

addressing Mr. Zoltowski's financial calculations,⁵² the following paragraphs focus on the areas where I do have relevant experience and expertise.

A. The method FICO uses to calculate license fees is normal and customary for the commercial software industry

It is the normal custom and practice of the industry for providers of commercial software to vary the prices they charge for software licenses based on numerous measurable and/or estimable metrics, including (but not necessarily limited to) such things as:

- Size of implementation (*e.g.*, number and/or type of users, amount of usage, *etc.*)
- Type of software license (*e.g.*, enterprise, site, server type, named user, concurrent user, *etc.*), limited by the number of sites, servers, users, *etc.*
- Authorized installation locations (*e.g.*, domestic only or world-wide)
- Number and type of applications the licensed software will be used for
- Number and/or location of servers where the software will be installed
- Potential for add-on sales of implementation and/or consulting services, or growth in the number of sites, servers, users, *etc.*
- Whether the licensee has a pre-negotiated discount schedule (*e.g.*, universities/students, government agencies, *etc.*)

In addition, it is normal for software companies to consider sales and marketing issues including bidding situations against competitors, the nature/ history of the client relationship, potential reference value of the client, *etc.* Landy and Classen discuss many of these issues, including sales negotiations and the different types of software licenses.⁵³

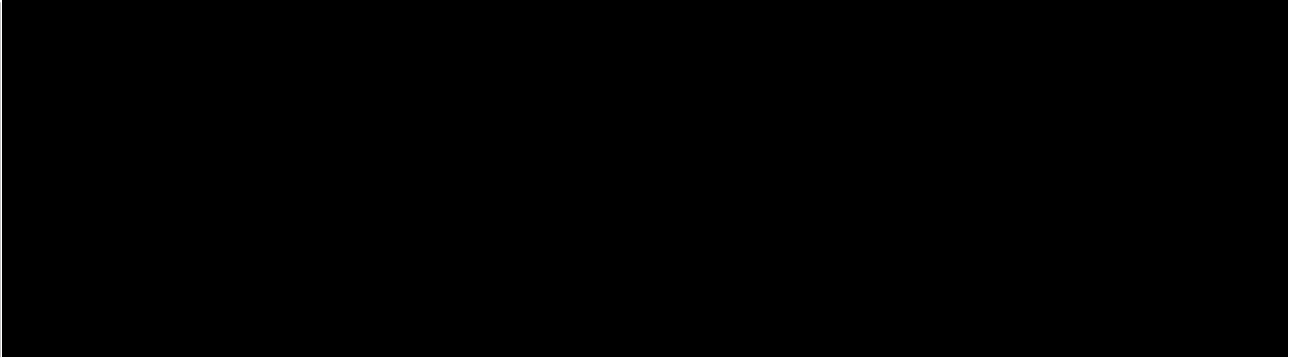
Dr. Kursh's claim that "the assumptions behind FICO's models used to calculate those fees are not commercially reasonable"⁵⁴ is unsupportable. The criteria FICO

⁵² *Id.*

⁵³ Landy, *op. cit.*, pages 4–5, 317–318 and 321–329; and Classen, *op. cit.*, pages 3–7, 47–62 and 155–160.


⁵⁴ Kursh Report, *op. cit.*, paragraph 136 on page 48.

cites in its pricing documents include several of the same considerations I listed above, which is supported by both (a) Landy's and Classen's writings about software licensing, and (b) the January and April deposition testimony given by Mr. Waid (the senior FICO executive with responsibility for Blaze Advisor). These criteria



In addition to these factors, which are commonly used by commercial software



 which is also consistent with the customs and practices of the commercial software industry. This last custom pricing process is

⁵⁵ See. *e.g.*, Waid 1/16/2019 deposition transcript, pages 112–115, 150–155; Waid 4/2/2019 deposition transcript, pages 27 and 65–68; and FICO0000057, 0830 (page 4 of 5) and 7406.

⁵⁶ See. *e.g.*, Waid 4/2/2019 deposition transcript, pages 17 and 20; FICO0000057 and 0830 (page 4 of 5).

⁵⁷ See. *e.g.*, Waid 1/16/2019 deposition transcript, page 49; and FICO0057388, 7392, 7403, and 7405.

⁵⁸ See. *e.g.*, Waid 4/2/2019 deposition transcript, pages 57–63; and FICO0000830 (page 4 of 5) and 0057388–7389.

⁵⁹ See. *e.g.*, FICO0000057 and 0830 (page 4 of 5).

⁶⁰ See. *e.g.*, Waid 4/2/2019 deposition transcript, page 17; and FICO0000830 (page 4 of 5) and 0057404.

⁶¹ See. *e.g.*, Waid 4/2/2019 deposition transcript, pages 27–27 and FICO0000057.

⁶² See. *e.g.*, Waid 1/16/2019 deposition transcript, page 49; and FICO0057388.

⁶³ See. *e.g.*, Waid 1/16/2019 deposition transcript, pages 46–47; FICO0000830 (page 4 of 5) and 0057391.

⁶⁴ See. *e.g.*, Waid 1/16/2019 deposition transcript, page 12; and FICO0000830 (page 4 of 5) and 0057390.

⁶⁵ See. *e.g.*, Waid 4/2/2019 deposition transcript, pages 66–68.

exactly what FICO did in developing the license fee quote it gave to Federal in March 2016, when it offered a discounted fee level of [REDACTED] below list minus a credit for the licensing fees already paid.⁶⁶

Although Dr. Kursh criticizes the “assumptions behind FICO’s models used to calculate [license] fees”⁶⁷ (the final paragraph in the explanation of his third opinion), none of the paragraphs that lead to this conclusion actually explain why the assumptions or the model are bad.⁶⁸ I suggest the reason he provides no such examples is because commercial software pricing methods are very fluid and, as I explained immediately above, FICO does nothing unusual in this regard.

B. Dr. Kursh’s criticism of FICO’s sizing and pricing has no basis

The majority of the issues the Kursh Report raises in relation to what it describes as “Federal’s actual use of Blaze [Advisor]” pertain to the basis Mr. Zoltowski uses for his damages calculations, which is a topic area I am not addressing.

However, I do have knowledge and expertise relevant to some of the assertions Dr. Kursh makes to explain his criticism of Mr. Zoltowski. In particular, there is controversy regarding which of Federal’s insurance applications utilize Blaze Advisor.⁶⁹ The McCarter Report (see Opinion #5, below) says there are only ten such applications, an assumption that Dr. Kursh apparently uses. However, Chubb & Son identified 15 applications that use Blaze Advisor in a communication with FICO on February 25, 2016.⁷⁰

Dr. Kursh also criticizes Mr. Zoltowski, repeating his assertion that Federal does not owe additional license fees for use of the Blaze Advisor license outside of the United States because Chubb & Son’s license was designated as being enterprise-

⁶⁶ *Id.*

⁶⁷ Kursh Report, *op. cit.*, paragraph 136 on page 48.

⁶⁸ Dr. Kursh does criticize some of Mr. Zoltowski’s methods but those are damages calculations, not commercial software license pricing procedures.

⁶⁹ Kursh Report, *op. cit.*, paragraphs 101–104.

⁷⁰ FICO0001359.

wide, once again ignoring the geographic limitations in the License Agreement.⁷¹ His assertion is flawed for the same reasons as explained above.

Dr. Kursh continues this criticism of Mr. Zoltowski by claiming that “FICO incorrectly applies its own sizing methodology”.⁷² However, his conclusion is flawed because he has ignored Mr. Waid’s 30(b)(6) deposition testimony on January 16 of this year⁷³ where Mr. Waid explained how the sizing matrix⁷⁴ is used to determine the correct size classification for any potential licensee. As Mr. Waid describes, FICO personnel use the matrix by looking at each of the prospect’s characteristics that correspond to the criteria listings on the left column of the sizing matrix, and whichever characteristic puts the prospect into the largest size category determines the prospect’s size category for every option or product where the size category matters. The only substantive variation FICO made from its normal size/conditions-based pricing method was the pricing option that included the [REDACTED] discount from the calculated list price basis. And, to offer that, Waid had to justify the discount to FICO’s senior management because it was more generous than the usual top end discount [REDACTED]

To support his opinions denigrating Mr. Zoltowski’s damages assumptions, Dr. Kursh describes two hypothesized negotiation scenarios, one for a software license that Dr. Kursh believes should have occurred (but never did). One of these hypothetical negotiations was for a single division of an enterprise and the other one was for a full enterprise-wide software license.⁷⁵ But his analysis fails to support his opinion because, to my understanding, damages calculations are properly based only on facts, not hypotheticals. There is no normal custom or practice of the commercial software industry that would have dictated that such negotiations would or should have occurred. As I noted in the explanation of Opinion #2, offers went back and forth between FICO and Federal during February and March 2016 (until Federal’s negotiator withdrew from a scheduled meeting without ever responding to FICO’s attempts to reschedule). In my experience, it is

⁷¹ Kursh Report, *op. cit.*, paragraph 105.

⁷² *Id.*, paragraphs 106–124, 127–129 and 131–135.

⁷³ Waid 1/16/2019 deposition transcript, pages 114–116.

⁷⁴ FICO00000830.

⁷⁵ Kursh Report, *op. cit.*, paragraphs 125_126.

not appropriate for an expert to base opinions on hypothetical events that never occurred.

The Kursh Report tries to discredit FICO's discounting process by citing what he claims are typical software license discounts in the range of 20 to 90 percent. These numbers come from an online article published in 2004 on a web site called "Redmond Channel Partner Online"⁷⁶ that was authored by Mr. Stephen Swoyer, described in the article as a freelance journalist who writes about technology.⁷⁷ Dr. Kursh's quote from the Swoyer article is a short excerpted statement, apparently once made by an economics professor in a lawsuit totally unrelated to the dispute between FICO and Federal. The article focuses on the pricing of database software and cites only one example of applications software,⁷⁸ a situation where a software industry giant, Oracle, was competing with a major competitor, PeopleSoft, for the sale of general-purpose business/accounting software.

The Swoyer article fails to support Dr. Kursh's opinion regarding software discounts as it lacks relevance to any kind of software pricing (much less the 2016 pricing issues in this case) for multiple reasons: (1) Blaze Advisor is a special-purpose business application, nothing like PeopleSoft and Oracle Financials, the competing products cited in the article; (2) Swoyer wrote the article in 2004, 12 years before the acquisition of Federal in 2016; (3) general purpose business applications software is a very competitive market, in comparison with the market for specialized business software (such as Blaze Advisor) because the market is much larger and there are far more competitors; (4) general purpose business applications software was much more price competitive in 2004 than it is now because of the extensive industry consolidation that has taken place since then; and (5) Oracle has not competed with PeopleSoft for more than a decade because it acquired PeopleSoft three months after the article was published.

⁷⁶ The site (rcpmag.com) focuses on businesses and consultants who sell Microsoft products and/or provide services to Microsoft customers.

⁷⁷ Kursh Report, *op. cit.*, paragraph 60 on pages 16 and 17.

⁷⁸ Database software is an example of "systems software", the category of software that includes operating systems (*e.g.*, Microsoft Windows), which is entirely different from applications software, the category of software, like Blaze Advisor, that performs business functions.

Opinion #4: The terms “commercially reasonable” and “commercially unreasonable” used throughout the Kursh Report are so vague and undefined that judgments based on them are not supportable.

The term “commercially reasonable” is not, to my knowledge (as a Certified Management Consultant and a Certified Computing Professional), a term of art in either the business or the information technology community. Dr. Kursh uses these two descriptions 16 times throughout his expert report⁷⁹ to explain the reason for his having reached a conclusion or an opinion.

Despite this extensive use, Dr. Kursh neglects to meaningfully define these terms, nor does he cite any learned treatise that might explain its meaning. He explains briefly that he bases his determinations of whether something is or is not commercially reasonable on (a) the License Agreement, (b) FICO’s and Federal’s customs and practices, and (c) the customs and practices of the software industry. Dr. Kursh does not explain his qualifications or any specific work he has done to determine either Federal’s or (in particular) FICO’s customs and practices and he does not explain what method he uses to make assessments based on the combination of these factors. If Dr. Kursh intends commercially reasonable to refer to some specific industry-accepted standard of care, he fails to explain how one could determine whether any procedure or practice met that standard of care or not.⁸⁰

There are numerous conclusions Dr. Kursh reaches where he cites “commercially reasonableness” as all or part of his justification. These include allegations he makes that FICO was wrongly:

- Asserting license limitations he disagreed with, such as the limitation that Blaze Advisor must be installed within the United States or that use of Blaze Advisor must be limited to Chubb & Son.

⁷⁹ Kursh Report, *op. cit.*, paragraphs 45 (twice), 69 (twice), 71, 87, 88, 89, 90, 94, 95, 98, 124, 136 and 139; and in footnote 19 to paragraph 70.

⁸⁰ Note: I acknowledge that have used the terms “customs and practices of the commercial software industry”, “normal and customary”, “industry standard” and “typical” in explaining my opinions throughout this report. The difference is that I have described the years of industry experience and expertise that qualify me to make these judgments at the beginning of this report. In a few specific places where some extra explanation of my specialized experience or skills has qualified me to make particular determinations, I have explained those in the body of the report.

- Using the acquisition of Federal as a pretext for what he believes is an illegitimate increase in Blaze Advisor license fees.
- Interpreting the term “consent shall not be unreasonably withheld” to mean something other than “consent must be granted”.
- Enforcing license violations he believes FICO had ignored previously.
- Exercising the License Agreement’s termination provision without giving Federal all the time it desired to cease using Blaze Advisor.
- Using illegitimate methods to compute FICO’s monetary damages (FICO’s damages expert).

All of these conclusions are unsubstantiated because Dr. Kursh is simply using the term “commercially unreasonable” as a proxy to describe any FICO action he disagrees with.

The expert’s role, as I understand it, is not to make determinations (such as a determination on whether something is reasonable or not) that are supposed to be made by the Court or by a jury, but rather to provide information and/or determinations requiring specialized expertise, knowledge or skills that assist the judge or jury understand the evidence, so *they* can make the judgments they are designated to make.

The problem with Dr. Kursh’s reasonableness assessments is that they fail to provide any helpful or useful criteria that the Court or a jury could use to determine whether FICO’s licensing practices or Federal’s business positions are commercially reasonable. For this reason, I do not believe the opinions in the Kursh Report supported by Dr. Kursh’s “commercial reasonableness” criterion (apparently based solely on his personal interpretation of the meaning of the provisions in the License Agreement) are sufficiently reliable to be accepted.

Opinion #5: Mr. McCarter fails to support his contention that Blaze Advisor has minimal value to Federal because it is “industry agnostic”, easily replaceable and only one of many technologies that Federal employs to operate its insurance business. The evidence shows that FICO’s

Blaze Advisor provided critical capability, contributing to Federal's revenue that Chubb & Son had not developed internally.

The McCarter Report uses several explanations to try to minimize Blaze Advisor's value to Federal, but his own reasons undercut his conclusions. I disagree with these opinions for the following reasons.

Mr. McCarter acknowledges there are ten software applications that deploy Blaze Advisor, and "leverage" its functionality.⁸¹ This total of ten applications understates Federal's own application count of 15. These 15 applications were disclosed in a report attached to an e-mail sent to FICO by Ms. T. Pawloski, Federal's VP of Software Compliance and Optimization, Global Vendor Services Organization on February 25, 2016. McCarter does not explain this discrepancy.⁸²

A. Blaze Advisor is integrated into "core" Federal applications

Mr. McCarter contends that Blaze Advisor is not a core technology:⁸³

Federal has only automated a small amount of the business rules and decisions that take place every day to conduct business. Blaze plays a small role in the business processing ecosystem at Federal.

However, the McCarter Report notes that Blaze Advisor is "integrated with core insurance applications that have ... insurance functionality [needed] for selling and servicing insurance policies."⁸⁴ The phrase "integrated with core ... applications" has special meaning to information technology professionals due to its use of the business computing terms of art, "integrated" and "core":

- "Integrated" normally means that a component application (Blaze Advisor in this case) is linked into a host application (here, an insurance application) in a way that, *in the ideal*, would allow information to pass between them as if they were a single unified application. Depending on how "seamless" (*i.e.*, how close to the ideal) the integration is, this typically means that removal or

⁸¹ McCarter Report, paragraph 85 on pages 24.

⁸² FICO00001358–1359.

⁸³ McCarter Report, *op. cit.*, paragraph 74 on page 9.

⁸⁴ *Id.*, paragraph 91 on page 24.

replacement of an integrated component is likely to be difficult, time consuming and to risk endangering the operation of the host application.

- “Core application” normally means that the functions that the application performs are critical to the business because they perform irreplaceable business functions that could cause significant business problems if they failed.

When application developers design and build a new “core” application it would be the normal custom and practice of the commercial software industry to avoid integrating externally developed components (like Blaze Advisor) whenever possible to avoid introducing externally uncontrolled risk factors that could affect the “core” application functionality. The fact that Chubb & Son chose to integrate Blaze Advisor into several of its core insurance applications is evidence that, contrary to McCarter’s assertions, it has significant business value.

B. Whether Blaze Advisor is “industry agnostic” does not determine how much value it contributes to Federal’s business

Mr. McCarter contends that Blaze Advisor has little value to Federal because it is “industry agnostic”. For example, the McCarter Report states:

- Blaze Advisor is “industry agnostic”,⁸⁵ meaning its inherent capabilities are potentially usable in multiple industries and are not specifically focused to optimize its operation for any one industry.
- As delivered, Blaze Advisor⁸⁶ (a) includes no insurance-specific rules or capabilities that operate on their own, (b) cannot leverage FICO’s insurance expertise because FICO is not in the insurance industry, and (c) requires a substantial implementation effort by knowledgeable Chubb & Son personnel (with significant and costly assistance from FICO) to know what rules to put into it, how to put those rules in, and how to test the rules to make sure they function properly. In addition, Blaze Advisor requires licensees like Chubb & Son to spend significant time and effort entering the rules and testing their operation.

⁸⁵ McCarter Report, paragraphs 26, 70 and 157 on pages 9, 20 and 42.

⁸⁶ *Id.*, paragraphs 21–22, 24, 26, 71–75 and 91 on pages 8, 8-9, 9, 20-21 and 24.

But the McCarter Report fails to consider how, despite these facts, Blaze Advisor is still able to add significant value to the Federal insurance applications they are integrated with. The history (going back to February 2006) behind Federal's interest in Blaze Advisor is instructive on this point. In 2006, Chubb & Son prepared and sent out a 25-page Request for Information (RFI)⁸⁷ to acquire a software application needed to solve a critical business requirement that it had at the time.⁸⁸ The Introduction page of that RFI described (in part) the challenge it wanted the software application to address as follows:⁸⁹

Chubb and Son, ("Chubb") is an international Property and Casualty insurance company wholly owned by Federal Insurance Company. ... Chubb's business is divided into three strategic business units [including one called] Chubb Specialty Insurance ...

Chubb Specialty Insurance gets the majority of [Chubb's] revenue, typically achieved via premiums, from a relatively small number of very large accounts. ... The key strategic initiative in this area is expanding and growing the business into mid-market and smaller accounts. This is viewed as a good opportunity as it is understood that 85% of the identified and targeted customer set does not currently buy Chubb products. Chubb Specialty does not own a field force and does not do direct sales, but they view people in the field (agents and agencies) at the point of sale as being a key differentiator to their business.

... Movement to mid-market and smaller accounts has proven to be difficult, as this requires the team and systems to handle an increased volume of work (more transactions, policies, claims, etc.) in an environment where Chubb's current "Expense Management Strategy" does not allow for increases in staffing.

FICO (with Blaze Advisor) was a major provider of BRMS systems in 2006 and remains as one of the most widely used, powerful and highly rated BRMS products (now often referred to as Digital Decisioning Platforms) on the market today. In addition, Blaze Advisor had contributed to the success of other insurance companies starting before the Chubb & Son implementation.⁹⁰

So, when Chubb & Son selected a vendor to meet the needs described in the February 2006 RFI, it selected FICO's Blaze Advisor and incorporated it into

⁸⁷ FICO0057280-7304.

⁸⁸ See, e.g., The Chubb Corporation Annual Report 2007 (FICO0002297-2326), particularly Chairman's Letter to Shareholders, page 5 (FICO0002303).

⁸⁹ FICO0057284.

⁹⁰ See, e.g., FED008759-8761 (Sawyer Exhibit 74).

several of its critical business systems. Chubb & Son decided Blaze Advisor could add the value mentioned in the RFI, despite the facts alleged by Mr. McCarter regarding whether Blaze Advisor is “industry agnostic.”

C. The presence of competing alternative products does not diminish the value of Blaze Advisor

Mr. McCarter asserts that Blaze Advisor has marginal value to Federal because FICO has competitors and Blaze Advisor is not the market leader.⁹¹

The top business rules management vendors include IBM, Oracle, and FICO. IBM leads the market with 22.45% market share followed by Oracle with 18.93% market share. FICO is third in global market share with 12.93%. ... customers are not influenced by and do not care what rules management system the insurance company uses ...

... customers are not influenced by and do not care what rules management system the insurance company uses ...

Federal had, and continues to have, many alternatives to Blaze that could have been deployed to provide the same utility to its business operations as Blaze.

The fallacy of these statements is that market share is different than quality. While there are other Business Rules Management Solution (BRMS) systems on the market, and the BRMS that any company uses may not (as McCarter claims) be obvious to that company’s customers, the ability of the company to respond quickly and effectively to requests or inquiries is very noticeable and, when operating successfully, can bring very noticeable benefits.

Contrary to Mr. McCarter’s opinion, Blaze Advisor is the market leader. In an independent evaluation of 11 competing Digital Decisioning Platform products⁹² done last year by Forrester Research, a highly respected independent business and technology research firm, FICO’s Decision Management Suite (which includes Blaze Advisor as the core decisioning platform) was the top ranked competitor, described

⁹¹ *Id.*, paragraphs 80 and 27–28 on pages 21–22.

⁹² Rymer, John R. and Gualtieri, Mike; *The Forrester New Wave™: Digital Decisioning Platforms, Q4 2018, The 11 Providers That Matter Most And How They Stack Up*; October 17, 2018; ©2018 Forrester Research, Inc.; pages 4–6.

by Forrester as “lead[ing] with world-class decision management and analytics” and “best for companies automating consequential business decisions”.⁹³ .

If McCarter’s assertion that Federal has good, easily implemented, alternatives to Blaze Advisor were true, the normal and customary thing for it to have done after the acquisition would have been to replace it immediately. Chubb & Son did not do that.

D. Federal’s effort to continue using Blaze Advisor discredits its claim that Blaze Advisor has little importance to the company

Chubb Limited’s 2018 Annual Report⁹⁴ attests to Chubb’s success in meeting the middle-market challenge described in the 2006 RFI. Chubb Chairman and CEO Evan Greenberg’s letter to shareholders describes the company’s successful middle market penetration (in the first among many mentions) as follows:⁹⁵

Complementing our large corporate capabilities in the U.S. is our commercial P&C franchise that serves the middle–market business community. We have an extensive local presence on a national basis and an ability to serve these companies as they manage their business inside the U.S. and beyond its borders. Our product breadth ranges from basic package plans to broad specialty coverages – the same as our large corporate division.

The critical competitive factor is not the rules (which Chubb & Son had before it licensed Blaze Advisor), it is the rapid response and intelligence to client demands that Blaze Advisor makes possible.

Chairman Greenberg refutes McCarter’s assertions⁹⁶ that the “industry agnostic” software-based decision-making functionality was unimportant in the 2018 Annual Report where he attributes Chubb’s success in the mid- and small-market commercial insurance business to the company’s technology, particularly the

⁹³ Of the two alternative products cited by McCarter, IBM ranks much lower and Oracle is not even included among what Forrester described as “the 11 most significant providers in the category,” which is significantly different than the market shares McCarter uses (McCarter Report, paragraph 80).

⁹⁴ Chubb Limited is the publicly-traded acquiring company that is the top-level parent of Federal and its Chubb & Son division today.

⁹⁵ Chubb Limited 2018 Annual Report, page 11.

⁹⁶ *Id.*, paragraph 81–82 on page 22.

technology Chubb & Son was seeking when it selected Blaze Advisor to meet the needs described in the 2006 RFI, stating:⁹⁷

In 2018, we continued to make significant progress with our small commercial business initiative globally. ... In the U.S., this is a highly automated digital experience, where 80% or more of the submissions are not touched by humans after they leave the agent's office. Technology is a competitive weapon. We have over 4,000 agents in the U.S. on our Chubb MarketplaceSM platform quoting, issuing and servicing clients.

I know from experience with consulting clients that what Chubb & Son has achieved with Blaze Advisor is a classic success story for powerful and sophisticated business software applications. It is the objective of what management scholars and innovative technology leaders refer to a "Business Process Redesign".⁹⁸

E. The Number of Applications and Technologies Used by Federal has no bearing on the value of Blaze Advisor to Federal's Business

Finally, I do not accept McCarter's assertions that use his counts and comparisons of the numbers of applications and technologies as a proxy for assessing the value of Blaze Advisor.⁹⁹ As noted just above, it is none other than Chairman Greenberg who credits much of Chubb's success to its being able to provide quality service in an automated way for routine activity (the precise capability that Blaze Advisor provides) in order to free up Chubb's employees for high-value customer interaction.

VI. PUBLICATIONS

I have authored a book, "Buying a Computer for Your Growing Business, An Insider's Guide," published by Dow Jones-Irwin in 1984. I have also published two articles: "Hard Drive Archaeology: Digging It Up with Forensic Data Recovery", For The Defense, July 2002; and "Seven Keys to a Successful Internet Strategy," Association Trends, 2002.

⁹⁷ Chubb Annual Report, *op. cit.*, page 13 (emphasis added).

⁹⁸ See, e.g., Business Process Redesign, Bain & Company <<https://www.bain.com/consulting-services/performance-improvement/business-process-redesign/>>.

⁹⁹ McCarter Report, see, e.g., paragraphs 87–90 and 98 on pages 23–24 and 27.

VII. PRIOR TESTIMONY

Within the past four years, I have testified in the following cases:

- Armour Capital Management LP v. SS&C Technologies, Inc., United States District Court, District of Connecticut (deposition testimony).
- QAD Inc. v. Ingersoll-Rand Company, United States District Court, Central District of California (deposition testimony).
- Gish v. Meisenheimer and Southwest Advanced Neurological Rehabilitation, Superior Court of the State of Arizona in and for the County of Maricopa (deposition testimony).
- In re: Symbol Technologies, Inc. Securities Litigation, United States District Court, Eastern District of New York (deposition testimony).
- State Controller's Office v. SAP Public Services, Inc., Superior Court for the State of California, for the County of Sacramento (deposition testimony).
- Oracle USA, Inc. v. Rimini Street, Inc.; United States District Court, District of Nevada (deposition and trial testimony).
- Hodell-Natco Industries, Inc., v. SAP America, Inc., et. al.; United States District Court, District of Northern District of Ohio, Eastern Division (deposition and trial testimony).
- Hetherington v. Omaha Steaks; United States District Court, District of Oregon at Portland (deposition testimony).

VIII. COMPENSATION

My compensation for this assignment is \$500 per hour for all work and travel time, plus all out-of-pocket expenses, which are billable at their actual cost.

IX. CONCLUDING COMMENTS

Consistent with the preceding explanations, this report summarizes my opinions to a high degree of professional certainty and presents the basis on which they were formed. If additional documents or other information becomes available as a part of the ongoing litigation process, and I will continue my review and analysis of the

issues discussed in this report. I therefore reserve the right to supplement or update this report, and the opinions and the bases for them stated herein (as well as, potentially, adding new opinions if appropriate), if such further information becomes available.



Brooks Hilliard is one of fewer than 15 consultants in the world to have achieved both the Certified Management Consultant (CMC) and Certified Computing Professional (CCP) designations, the only internationally recognized certifications in each field.

To achieve this distinction, Mr. Hilliard has undergone peer reviews, client audits, competency tests and oral interviews; he has complied with continuing education requirements and has pledged to uphold the Codes of Ethics for both organizations.

Signed:

A handwritten signature in dark ink, reading "Brooks L. Hilliard".

Brooks L. Hilliard CMC® CCP
President
Business Automation Associates, Inc.



Certified
Management Consultant

What's Behind the "CMC"

Certification When you see the initials "CMC" following a consultant's name, it means that he or she is a Certified Management Consultant and has met the strict certification requirements of the Institute of Management Consultants. The Institute was founded in 1968 by the principal associations in the consulting field to establish publicly recognized standards of competence and professional conduct for the individual management consultant. Applicants for certification undergo a thorough investigation of their consulting experience: A panel of senior consultants interviews them to verify their technical competence, and they must pass a written examination demonstrating their familiarity with the Institute's Code of Ethics.

A Code of Ethics CMCs pledge in writing to abide by the Institute's Code of Ethics. Their adherence to the Code signifies voluntary assumption of self-discipline above and beyond the requirements of law. Key provisions of the Code require that CMCs:

- Safeguard confidential information.
- Render impartial, independent advice.
- Accept only those client engagements they are qualified to perform.
- Agree with the client in advance on the basis for professional charges.
- Develop realistic and practical solutions to client problems.

The Institute enforces the Code by receiving and investigating complaints of violations and by taking disciplinary action, including revocation of certification against any member who is found guilty of Code violation.

Standards of Competence Every step leading to the CMC designation has been designed to verify the candidate's professional competence. A Certified Management Consultant has:

- At least five years of experience in the full-time practice of management consulting, with major responsibility for client projects during at least one of those years.
- Multiple references, most of them officers or executives of client organizations. These references have been investigated to assure that the consulting relationships were satisfactory.
- Provided written summaries of five client assignments (disguised to protect client identity).
- Passed a qualifying interview by senior CMCs, demonstrating professional competence, currency in areas of specialization, application of experience, and understanding of the management consulting process.

The Mark of Excellence The CMC® is a certification mark registered with the U.S. Patent and Trademark Office. The CMC® is recognized worldwide by the International Council of Managing Consulting Institutes (ICMCI) (www.ICMCI.org). Certification by the Institute of Management Consultants is the mark of excellence among management consulting professionals. In selecting management consultants, it is good practice to seek individuals who meet the profession's standards of competence and ethics.



Exhibit #2

VALUE of HIRING and WORKING with Certified Computing Professionals

The world relies heavily on technology to perform vital personal, public and business functions. It is imperative that the individuals involved in the design and delivery of the systems behind that technology

- Uphold ethical practices in their day to day activities
- Master the body of knowledge of the profession
- Ensure that access to computerized information remains confidential
- Provide open and complete communications to clients, employers and the public
- Act to ensure that information technology serves and benefits society at large

The CCP designation ensures that its holder is committed to these principles. It also helps consumers to identify superior suppliers of Information and Communications Technologies' (ICT) products and services that can help enhance the effectiveness of their organizations.

1. BENEFITS OF THE CCP TO PURCHASERS OF ICT SERVICES AND EQUIPMENT:

- Reduce risk: CCP holders undergo rigorous admission criteria
- Improve quality: CCP holders must complete ongoing professional development to remain current with technologies and techniques
- Identify superior service providers: Reduce time spent searching for qualified service
- Obtain recourse for unprofessional activity: CCP holders are accountable to the Certification Council and panels of peer evaluations

2. BENEFITS OF THE CCP TO INFORMATION SYSTEMS MANAGERS:

- Improve service: CCP certified staff ensure timely and proper delivery to clients
- Control costs: 65000 certified holders ensure needs can be met at the highest levels of professional work
- Maintain industry knowledge: CCP holders have increased access to educational and professional development opportunities and often at lower costs
- Streamline recruiting: Narrow candidate searches and identify candidates quickly
- Enhance confidentiality: ICCP Code of Ethics guarantees confidentiality at all times
- Develop staff: Ensure ongoing professional development and tracking for existing staff through ICCP's transcript system

3. BENEFITS OF THE CCP TO HUMAN RESOURCE PROFESSIONALS:

- Narrow candidate searches: CCP as a base requirement for applications reduces total number of applicant candidates to those fully qualified
- Deeper evaluation of selected/qualified applicants: The ICCP HR assessment system allows you to assess, externally & impartially, the strength of knowledge and skills of individual applicants for specific technology areas
- Simplify application screening: CCP helps identify qualified applicants quickly
- Control costs: large base of CCP holders ensures that your needs can be met
- Enhance company marketability: CCP holders enhance an organization's image
- Develop staff: Ensure ongoing commitment by staff towards maintaining the currency of their knowledge and skills

4. FINDING A CCP HOLDER IN YOUR COMMUNITY

- The public may request a search for a registered CCP holder(s) in your state or province. Contact the ICCP office through email at office@iccp.org to request this service.
- Please note there is a fee for service for this activity.

ICCP, 2350 East Devon Ave, Suite 115, Des Plaines, Illinois 60018- 4610, USA
 phone: 847-299-4227 or 800-843-8227 fax: 847-299-4280 email: office@iccp.org
 web site: www.iccp.org

Exhibit #3



PROFESSIONAL BIOGRAPHY OF BROOKS L. HILLIARD CMC® CCP

Brooks Hilliard, President of Business Automation Associates, Inc., is one of fewer than 15 professionals in the world who is both a Certified Management Consultant™ (CMC) and a Certified Computing Professional (CCP). Business Automation is an independent consulting firm based in Scottsdale, Arizona and specializing in computer system selection and problem resolution. In his consulting capacity, Mr. Hilliard has been engaged by more than 200 firms in a wide variety of industries and professions. Although it has no affiliation with any supplier of computer products or services, Business Automation has recommended systems incorporating products from nearly every major hardware manufacturer and software developer. In order to maintain its objectivity and avoid any possibility of conflict of interest, Business Automation does not do software development, implement computer software or systems, or sell any computer products or services.

Approximately a half of Business Automation's engagements have been expert witness/consultant projects. Mr. Hilliard has testified more than 50 times and has been engaged for several dozen expert assignments in 37 states, including matters relating to computer software/system implementation and non-performance (both software and hardware), intellectual property (patent, copyright and trade secret matters), software licensing and systems contracting, computer security, recovery of missing and deleted data and the use of fraudulent computer evidence. His activities have included assistance with case evaluation, development of pre-trial and deposition strategies, evaluation of damages, development of expert opinions and deposition/courtroom testimony. He has been successfully Daubert tested and qualified as an expert in both state and federal jurisdictions. Prior to founding Business Automation in the 1980s, Mr. Hilliard worked for several computer companies where his responsibilities included positions in software development, sales, marketing, field service, contract negotiations and general management.

The CMC designation is awarded by the Institute of Management Consultants, USA, the US chapter of the only world-wide certifying body for management consultants. The CCP designation is awarded by the Institute for the Certification of Computer Professionals, an international certifying authority sponsored by more than twenty domestic and international computer professional associations. To achieve these certifications, Mr. Hilliard has undergone peer reviews, client audits, competency tests and oral interviews; he has complied with continuing education requirements and has pledged to uphold the Codes of Ethics for both organizations. He has also served as a member of the national Board of

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PROFESSIONAL BIOGRAPHY OF BROOKS L. HILLIARD CMC® CCP (CONTINUED)

Directors and Chairman of the Ethics Committee for the Institute of Management Consultants, USA.

In addition to his consulting activities, Mr. Hilliard has served as an officer or board member for the Arizona Chapter of the Institute of Management Consultants, the Arizona Harvard Business School Association, MIT Alumni Club of Phoenix, the Arizona Chapter of the National Conference of Christians and Jews (NCCJ), Devereux Foundation Arizona Advisory Board and the Phoenix 100 Rotary. He has also been an active participant in the Arizona State Bar Technology Task Force, the Arizona Technology Council, the Independent Computer Consultant Association and the Forensic Expert Witness Association. He is a member of the IEEE (formerly the Institute of Electrical and Electronics Engineers) and the Project Management Institute. He has done commentary for Public Radio International's nationally-syndicated MARKETPLACE news program, led seminars for the American Management Association and spoken professionally at numerous computer, management, professional, corporate and trade association meetings.

Mr. Hilliard has also authored a book, "Buying a Computer for Your Growing Business, An Insider's Guide", which was published by Dow Jones.

Mr. Hilliard's educational background includes an M.B.A. from Harvard Business School with emphasis on small business management and marketing. He also holds a Baccalaureate degree in mechanical engineering with Deans' List academic honors from the Massachusetts Institute of Technology. In addition, Mr. Hilliard has served as a Faculty Associate with the Arizona State University School of Business.

Born and raised in Los Angeles, Mr. Hilliard has lived in Arizona, California, Massachusetts, Maryland and Washington, D.C. (where he served as an officer in the U.S. Coast Guard).

Exhibit #4



MATERIALS REVIEWED

Pleadings, Declarations and Expert Reports

Federal's Response to Plaintiff's First Set of Requests for Admissions dated 5/11/17

Federal's Response to Plaintiff's Second Set of Requests for Admissions dated 1/30/18

Plaintiff's Second Supplemental Answers to Interrogatory Nos. 6-9 dated 4/23/18

Federal's Second Supplemental Answers to Interrogatory Nos. 2, 3, and 4 dated 6/21/18

Federal's Second Supplemental Answer to Plaintiff's Interrogatory No. 16 dated 1/21/19

Federal's Third Supplemental Answer to Plaintiff's Interrogatory No. 17 dated 1/21/19

Federal's Third Supplemental Answer to Plaintiff's Interrogatory No. 19 dated 1/21/19

Federal's Third Supplemental Answer to Plaintiff's Interrogatory No. 20 dated 1/21/19

Federal's Fourth Supplemental Answer to Plaintiff's Interrogatory No. 18 dated 1/21/19

Federal's Third Supplemental Answer to Plaintiff's Interrogatory No. 16 and Fourth Supplemental Answer to No. 17 dated 2/28/19

Federal's Fourth Supplemental Answer to Plaintiff's Interrogatory No. 19 dated 2/28/19

Federal's Fourth Supplemental Answer to Plaintiff's Interrogatory No. 20 dated 2/28/19

Federal's Fifth Supplemental Answer to Plaintiff's Interrogatory No. 18 dated 2/28/19

Federal's Fourth Supplemental Answer to Plaintiff's Interrogatory No. 16 and Fifth Supplemental Answer to No. 17 dated 3/2/19

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Federal's Fifth Supplemental Answer to Plaintiff's Interrogatory No. 19 dated 3/2/19

Federal's Fifth Supplemental Answer to Plaintiff's Interrogatory No. 20 dated 3/21/19

Federal's Fifth Supplemental Answer to Plaintiff's Interrogatory No. 16 and Sixth Supplemental Answer to No. 17 dated 3/21/19

Federal's Sixth Supplemental Answer to Plaintiff's Interrogatory No. 18 dated 3/21/19

Declarations and Expert Reports

Declaration of William Waid with Exhibit A dated 2/5/18

Expert Report of Bick Whitener dated 4/19/19

Expert Report of Neil Zoltowski dated 4/19/19

Expert Report of Steven Kursh, dated 5/17/2019

Expert Report of William McCarter, dated 5/17/2019

Expert Report of Christopher Bakewell, dated 5/17/2019

Depositions

Deposition Transcript of Henry Mirolyuz 7/31/18

Deposition Transcript of Henry Mirolyuz 1/11/19

Deposition Transcript of Oliver Clark 9/11/18

Clark Exhibits 46-62

Deposition Transcript of Michael Sawyer 10/2/18

Sawyer Exhibits 73-74, 78, 81-84

Deposition Transcript of Russell Schreiber 10/24/18

Schreiber Exhibits 105-106, 111, 115-120, 125-143

Deposition Transcript of Ramesh Pandey 11/13/18

Deposition Transcript of Ramesh Pandey 1/22/19

Pandey Exhibits 278-284

Deposition Transcript of Jandeen Boone 2/6/19

Boone Exhibits 305-330

Deposition Transcript of Lawrence Wachs 2/26/19

Wachs Exhibits 331-337

Deposition Transcript of Chris Ivey 3/14/19

Ivey Exhibits 54, 60, 380

Deposition Transcript of Kevin Harkin 3/25/19

Harkin Exhibits 405-408, 410, 415

Deposition Transcript of Tamra Pawloski 1/18/19

Pawloski Exhibits 240, 253-267

Deposition Transcript of Thomas Carretta 10/9/18

Carretta Exhibits 90-103

Deposition Transcript of Thomas Carretta 3/22/19

Carretta Exhibits 395-398

Deposition Transcript of William Waid 1/16/19

Waid Exhibits 223-231, 232-236

Deposition Transcript of William Waid 4/2/19

Waid Exhibit 421

Non-Bates stamped items

Bain & Company, *Business Process Redesign* <<https://www.bain.com/consulting-services/performance-improvement/business-process-redesign/>>.

Classen, H. Ward, *A Practical Guide to Software Licensing for Licensees and Licensors, 6th Edition*, ©2016, American Bar Association.

Landy, Gene K., *The IT/Digital Legal Companion*, ©2008, Syngress Publishing, Elsevier, Inc.

Rymer, John R. and Gualtieri, Mike; *The Forrester New Wave™: Digital Decisioning Platforms, Q4 2018, The 11 Providers That Matter Most And How They Stack Up*; October 17, 2018; ©2018, Forrester Research.

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